

Remarks

In an Office Action dated April 18, 2006 and made final, claims 15-19 and 22 were rejected under 35 U.S.C. § 102 as being anticipated by newly cited U.S. Patent 5,525,157 to Hawkins et al. Claims 20, 21, and 23-25 were rejected under 35 U.S.C. § 103 as being unpatentable over Hawkins et al., in view of U.S. Patent No. 5,879,459 to Gadgil et al. or U.S. Patent No. 6,162,367 to Tai et al., further in view of U.S. SIR H1962 H.

In response, applicants propose amending independent claim 15 to incorporate the subject matter of dependent claim 20, and amending independent claim 22 to incorporate the subject matter of dependent claim 23. Accordingly, claims 20 and 23 have been canceled, and the dependency of claim 24 has been amended. Claims 15-19, 21, 22, 24 and 25 are pending for consideration.

Applicants submit that this proposed amendment is consistent with 37 CFR 1.116 as placing all remaining claims in condition for allowance. Applicants further respectfully request reconsideration of the newly postulated obviousness rejection.

Amended claim 15, previously presented as claim 20, has been improperly rejected. In doing so, the examiner has improperly dealt on a piece-meal basis with a combination of features that when considered together evidence nonobviousness.

The examiner begins by independently dealing away the structure recited in previously presented independent claim 15. In so doing, the examiner dismisses the "new use" of the allegedly old chamber structure (i.e., "etching a polysilicon hard mask from the semiconductor substrate") as being merely "an intended use." (See, Office Action at page 2). Were it true that amended 15 merely recited a new use for an old chamber structure, then an obviousness finding might be reasonable (See, for example, *Atlas Powder Co. v. Ireco, Inc.*, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999)), setting forth the general rule that a new use for an old structure, standing alone, is not patentable.

However, after this first finding which dismisses the expressly recited "new use", the examiner goes on to independently conclude that incorporation of a conventionally known puff valve within the chamber structure would also have been obvious. By separating these two inquiries, and independently dismissing both inventive aspects (that is, the new use and a structural modification required to accomplish the new use), the examiner erred.

Amended claim 15 requires in addition to the new use, a slight, albeit patentably significant, structural change to accomplish the new use. The law has long recognized an exception to the general "new use" rule noted above under these circumstances. See, for example, *In re Certain Steel Rod*, 218 USPQ 444, 447, U.S. Int'l Trade Comm'n (1982), citing with approval the statement in Chisum on Patents 1:1.03[8], "[t]he altered product (machine manufacture, or composition of matter) process may be patented if the discovery of the new use and the alteration, considered together, indicate "invention" that is nonobviousness under Section 103". (other citations omitted, emphasis original).

Amended claim 15 clearly sets forth a new use for the conventional single wafer processing chamber suggested in Hawkins et al. It also adds a puff valve to accomplish this new use. Applicants are entitled to a clear consideration of these facts "taken together" before an obviousness finding can be made.

The same can be said for amended claim 22 (previously presented as claim 23).


In addition to merely incorporating the subject matter of previously allowable claim 20 into independent claim 15 and the subject matter of previously allowable claim 23 into independent claim 22, applicants have further clarified that puff valve operation occurs when the spin chuck rotates.

However, this minor additional clarification is immaterial to the key point that final rejection of at least original claims 20 and 23 was improper as the scope of these claims has not been considered as required by law.

At a minimum, a clear negative determination by the examiner of these factors
"taken together" will clarify applicants grounds for Appeal.

Respectfully submitted,

Volentine Francos & Whitt, P.L.L.C.



Stephen R. Whitt
Registration No. 34,753

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Volentine Francos & Whitt, PLLC
One Freedom Square
11951 Freedom Drive, Suite 1260
Reston VA 20190
Tel. No. 571-283-0720
Fax No. 571-283-0740